

REMARKS

Applicant traverses each and every rejection and objection set forth in the Office Action. Claims 121 and 122 are new, introduce no new matter and are fully supported in the Specification and Drawings.

The Interview

Applicant thanks the Examiner for courtesies extended during the telephonic interview with Karl Bizjak and the undersigned on May 20, 2008. While no final agreement was reached, the Examiner explained some of the issues that she found to be confusing. The Examiner agreed that the objections to claims 2 and 4 are improper because the claims had been amended in a prior response such that the objected-to terms are no longer present in the claims. Applicant has amended claims 1, 16 and 38 in accordance with the Examiner's suggestion and for the sole purpose of expediting prosecution.

The Objections to the Specification and the §112 Rejections

In the Office Action, the Examiner expresses the opinion that the Specification provides inadequate support for certain claimed aspects of a time response algorithm. Applicant disagrees. Applicant directs the Examiner's attention to Figs 55A-55C, 56 and 57A-57B and to corresponding descriptions in the written description, commencing at page 119 of the specification where the operation of a variable attack and release filter is described. The Examiner will appreciate that the description and drawings referenced adequately teach all claimed aspects of the time response algorithm. Therefore, the §112 rejections of claims 2-4 are improper and should be withdrawn.

The Examiner maintains §112 rejections of claims 16-18, indicating that the rejection is based on a perceived lack of teaching of algorithms based on amplitude of response and error correction. Applicant has identified certain drawings and descriptions that addressed the Examiner's previously stated concerns. However, these identifications were not intended to be the all-inclusive and were meant only to serve as examples of relevant teachings in the Specification. Applicant would therefore encourage the Examiner to consider all teachings provided in the Specification and drawings of the Application. For example, and with regard to claims 16-18, Applicant submits that the claims are fully supported in the Specification; in that regard, the Examiner may find pages 121-131 and Figs. 57-61 instructive. Applicant submits that, since the claims are supported by the Specification and drawings, the rejections of claims 16-18 are improper and should be withdrawn.

Applicant traverses the newly applied rejections of claims 41, 43, 60, 62, 68, 69 75, 80 and 91. The Examiner erroneously states that the specification does not disclose root mean square ("RMS") methods for estimating power. Applicant directs the Examiner's attention to at least pages 66 and 86 of the Specification and recommends a thorough reading of the entire application. Therefore, the rejections and objections of claims 23, 41, 43, 60, 62, 69 and 80 should be withdrawn.

Regarding claim 36, the Examiner objects that the Specification lacks a teaching of binary states. However, the Specification teaches systems that include environmental sensors. *See, e.g.*, Page 103 *et seq.* It will be appreciated that a window up/window down status indicator may be an indicator that can adopt one of two states (indicating either up or down). Binary means "compounded or consisting of two things or parts: characterized by two." Webster's Third New International Dictionary, Unabridged. Merriam-Webster, 2002. <http://unabridged.merriam-webster.com> (25 May 2008). Therefore, a window up/down indicator can be referred to as a binary indicator. Regarding claim 37, Applicant submits that the recitation in the claim is supported in the Application. Applicant has cancelled claims 36 and 37 to expedite prosecution. Applicant asserts that the claims are allowable but cancels the claims for purposes of economy and intends to take up these claims in a continuation application.

Regarding claim 38, Applicant disagrees with the suggestion that the written description does not teach "a primary environmental input," but has nevertheless amended the claim to recite "an environmental input signal," which term is clearly supported in the Specification. The amendment to claim 38 is made for the sole reason of economy of argument and to expedite prosecution.

Regarding claim 50, Applicant submits that the Specification is replete with instances of combining at least some algorithms configured to perform the same function. Performance and combination is not always shown in the same Figure. Figs. 52A 52C, 53E and 53F, Figs 54A-54D and 61E are but a few of the many examples available. *See also*, related descriptions at the paragraph spanning pages 108 and 109 and paragraph spanning pages 132 and 133.

Applicant requests withdrawal of the remaining objections to the Specification. Applicant has attempted to identify relevant passages for the guidance of the Examiner. However, the Specification includes a great deal of relevant material and functional descriptions cannot always be distilled to a single sentence. Applicant requests the Examiner

to properly review the Specification in its entirety in order to afford the claims of the present Application a full and fair examination.

Regarding claim 17, the Examiner's confusion can be relieved by a careful consideration of the claim and claim 15. Claim 15 requires that modifying an environmental input includes multiple instances of modifying in accordance with the selected algorithm. Claim 17 further limits claim 15 by requiring combining at least some of the outputs of the multiple instances. It will be appreciated that modifying an input produces a modified representation of the input that is either an intermediate or an output. Accordingly, the recitation in claim 17 is clear and the §112 rejection of claim 17 should be withdrawn.

Regarding claim 19, a signal that includes a plurality of signals is well understood in the art. For example, the technique of performing Fourier analysis relies upon such understanding since the analysis characterizes a signal as a series of signals – typically harmonics of a fundamental signal – in order to perform frequency domain processing on a time domain signal. In another example, a baseband signal may be added to a carrier signal to obtain an AM or FM signal that includes baseband and carrier portions. Nevertheless, Applicant has amended the claim for clarity. Consequently, the rejection of claim 19 and its dependent claims is improper and should be withdrawn.

Claim 50 has been addressed above. Claims 71 and 73 have been amended to add proper antecedent bases as necessary. Therefore, the rejections of claims 71-81 and 89-93 should be withdrawn.

The Rejections under 35 U.S.C. §102

Applicant respectfully traverses the §102 rejections. Seligman does not teach a minimum detector with a time response but seeks the minimum amplitude from the envelope detector. However, for the sole purpose of advancing prosecution, Applicant has amended independent claims 1, 16 and 38 such that claim now requires an algorithm based on a time response comprising at least two components of group including delay, converge and slow time response. These amendments were made in accordance with the Examiner's suggestions. Seligman does not teach modification of an environmental input in this manner and the rejection of the claim should be withdrawn. Applicant reserves the right to resubmit the previously presented claims in a future continuation application.

As discussed above, claims 36 and 37 are cancelled to expedite prosecution.

The Rejections under 35 U.S.C. §103

Applicant respectfully traverses the rejection of claims 12, 13 and 15 for at least the reason that no combination of the cited art does teaches all limitations of amended independent claim 1 from which the rejected claims depend.

Regarding claims 21, 25, 26, 59, 60 and 62, Applicant has amended independent claims 21 and 25 to require generation of a limited negative feedback signal. The AAPA does not disclose generation of a limited negative feedback signal and is limited to teaching a positive loop. The use of limited negative feedback in context of adjusting to false noise floor changes associated with changes of acoustic environment (e.g. people moving) is both novel and non-obvious. It will be appreciated that the reduction of output in response to an increase in noise is counter-intuitive and that the increase in loop stability obtained by avoiding positive gain-chase is advantageous. Consequently, Applicant requests withdrawal of the rejections of claims 21 and 25 and of all their dependent claims.

Regarding claim 51, Applicant has amended the claim to require modifying the signal to noise ratio wherein the indication of noise power level is adjusted responsive to the noise sensitivity control signal. The art of record does not teach this limitation. Therefore, the rejections of claim 51 and its dependent claims should be withdrawn.

Regarding claim 55, Applicant has amended the claim to require providing a noise sensitivity control signal, and modifying the signal-to-noise ratio of a system output, wherein the indication of noise power level is adjusted responsive to the noise sensitivity control signal. The art of record does not teach this limitation. Therefore, the rejections of claim 55 and its dependent claims should be withdrawn.

Other Amendments

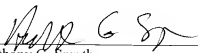
Applicant has added claims 121-123 to clarify certain aspects of the claimed inventions. Claims 41, 43, 60, 62, 68, 69, 75, 80 and 91 have been amended to eliminate reference to Fourier transforms. While Applicant disagrees with the objections based on Fourier transforms, the amendments are submitted to expedite prosecution. Claim 24 was cancelled for similar reason.

CONCLUSION

All objections and rejections have been addressed and prompt examination on the merits is earnestly solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is requested to contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,
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